

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A vascular prosthesis, comprising a ~~tube of material other than autologous vascular tissue, said tube comprising~~ tubular portion and an end formation configured for surgical connection to an opening formed in a blood vessel, said tubular portion including a decreased diameter and a narrower portion prior to commencement of said end formation, said end formation comprising an enlarged chamber ~~adapted to induce a concave section in said blood vessel upon attachment thereto.~~

2. (currently amended) The vascular prosthesis according to claim 1, wherein said ~~end formation further~~ enlarged chamber comprises a first diameter parallel to the axis of the tube and a second diameter transverse to the axis of the tube, wherein said first diameter is longer than said second diameter, said first diameter comprising a heel and a toe, wherein a transition between said tube and said toe is outwardly initially convex before a final concave portion.

3. (original) The vascular prosthesis according to claim 1, wherein said enlarged chamber is configured to promote localized movement of blood having a non-laminar nature with a shear stress inducing relationship to a wall of said blood vessel.

4. (original) The vascular prosthesis according to claim 2, wherein a transition between said tube and said heel is generally outwardly concave.

5. (original) The vascular prosthesis according to claim 2, wherein opposing sides of said second diameter are generally outwardly convex.

6. (original) The vascular prosthesis according to claim 2, wherein said first diameter is between approximately 14 and 36 mm and said second diameter is no greater than approximately 14 mm.

7. (currently amended) The vascular prosthesis according to claim 1, ~~wherein said tube further comprises~~ further comprising a second end formation.

8. (currently amended) The vascular prosthesis according to claim 7, wherein said second end formation comprises a second enlarged chamber ~~having~~ comprising a first diameter parallel to the axis of the tube and a second diameter transverse to the axis of the tube, wherein said first diameter is longer than said second diameter, said first diameter comprising a heel and a toe, wherein a transition between said tube and said toe is outwardly initially convex before a final concave portion.

9. (original) The vascular prosthesis according to claim 8, wherein a transition between said tube and said heel of said second enlarged chamber is generally outwardly concave.

10. (original) The vascular prosthesis according to claim 8, wherein opposing sides of said second diameter of said second enlarged chamber are generally outwardly convex.

11. (currently amended) The vascular prosthesis according to claim 8, further comprising a second decreased diameter portion prior to commencement of said second end formation ~~narrow section positioned between said tube and said second end formation, wherein a diameter of said second narrow section is less than a diameter of said tube.~~

12. (canceled).

13. (canceled).

14. (new) The vascular prosthesis according to claim 1, wherein the tubular portion and end formation are comprised of a material other than autologous vascular tissue.

15. (new) The vascular prosthesis according to claim 1, wherein the tubular portion and end formation are comprised of a polytetrafluoroethylene material.

16. (new) The vascular prosthesis according to claim 7, wherein the tubular portion, end formation and second end formation are comprised of a material other than autologous vascular tissue.

17. (new) The vascular prosthesis according to claim 7, wherein the tubular portion, end formation and second end formation are comprised of a polytetrafluoroethylene material.

18. (new) A vascular prosthesis, comprising a tube and an enlargement positioned at a distal end of the tube, the tube comprising a first diameter portion extending along a majority of the length of the tube and a second diameter portion positioned adjacent the enlargement, the first diameter being greater than the second diameter.

19. (new) The vascular prosthesis according to claim 18, wherein the enlargement includes an open end having a generally oval cross-section.

20. (new) The vascular prosthesis according to claim 18, wherein the tubular portion and enlargement are comprised of a polytetrafluoroethylene material.

21. (new) A vascular prosthesis, comprising a tube, a first enlargement positioned at a distal end of the tube and a second enlargement positioned at a proximal end of the tube, the tube comprising a first diameter portion extending along a majority of the length of the tube, a second diameter portion positioned adjacent the first enlargement and a third diameter portion positioned adjacent the second enlargement, the first diameter being greater than both the second and third diameters.

22. (new) The vascular prosthesis according to claim 21, wherein the tubular portion, first enlargement and second enlargement are comprised of a polytetrafluoroethylene material.